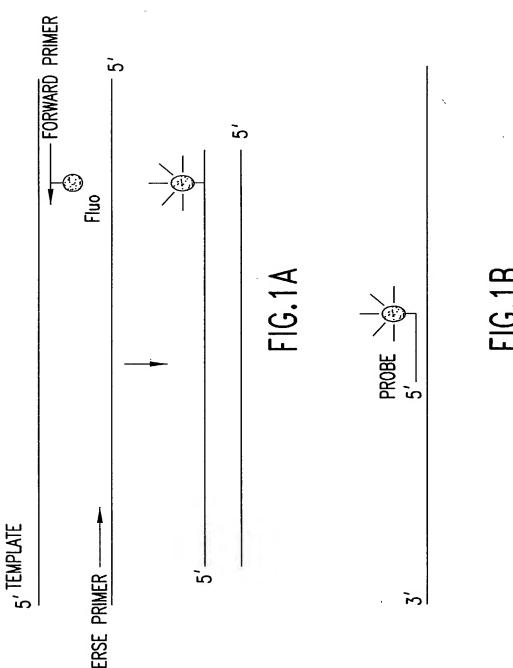
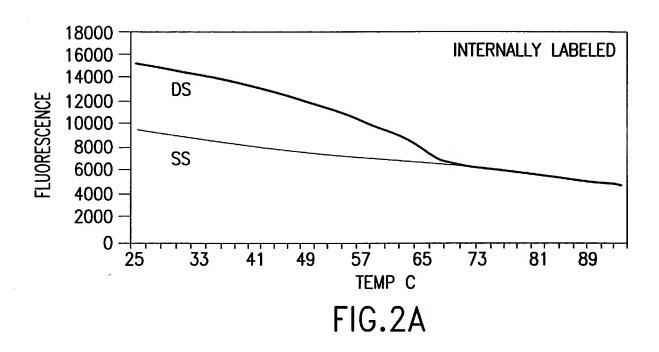
Appl No 10/026,952; Filed December 27, 2001 Dkt. No 0942 4980006/RWE/AGU; Group Art Unit 1623 Inventor(s) NAZARENKO et al , Tel. 202/371-2600 [Title Primers and Methods for the Detection and Discrimination of Nucleic Acids



- Appl No 10/026,952, Filed December 27, 2001 Dkt. No. 0942.4980006/RWE/AGU; Group Art Unit 1623 Inventor(s). NAZARENKO et al., Tel. 202/371-2600 Title: Primers and Methods for the Detection and Discrimination
- of Nucleic Acids



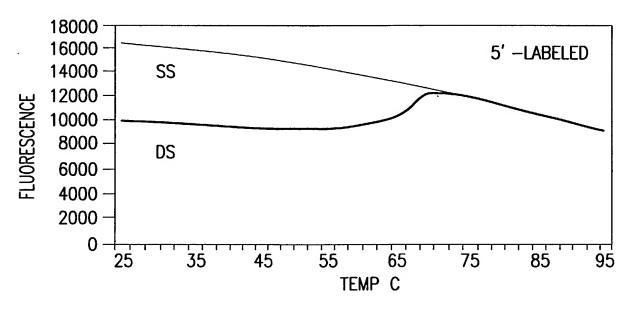


FIG.2B

Appl No 10/026,952; Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s). NAZARENKO et al., Tel. 202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

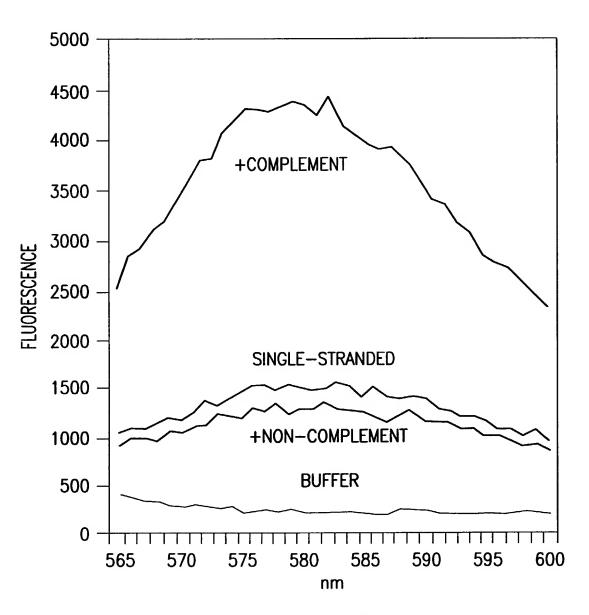


FIG.3

Appl No 10/026,952; Filed December 27, 2001
|Dkt No 0942 4980006/RWE/AGU, Group Art Unit: 1623
Inventor(s) NAZARENKO et al; Tel 202/371-2600
|Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

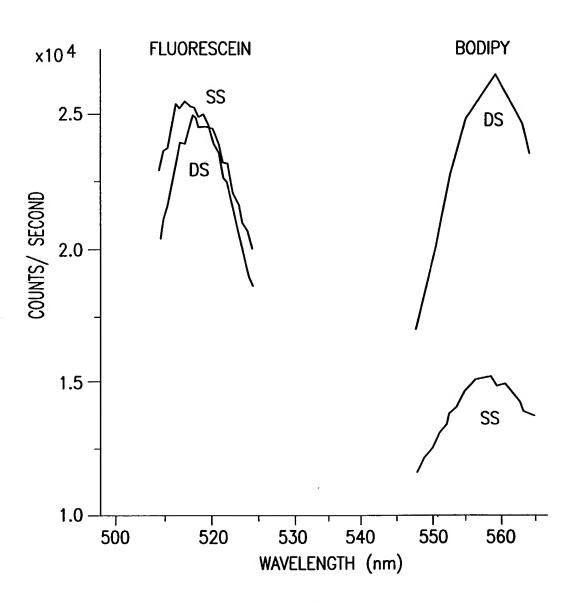


FIG.4

Appl No. 10/026,952, Filed December 27, 2001 Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s)· NAZARENKO *et al*; Tel· 202/371-2600 Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

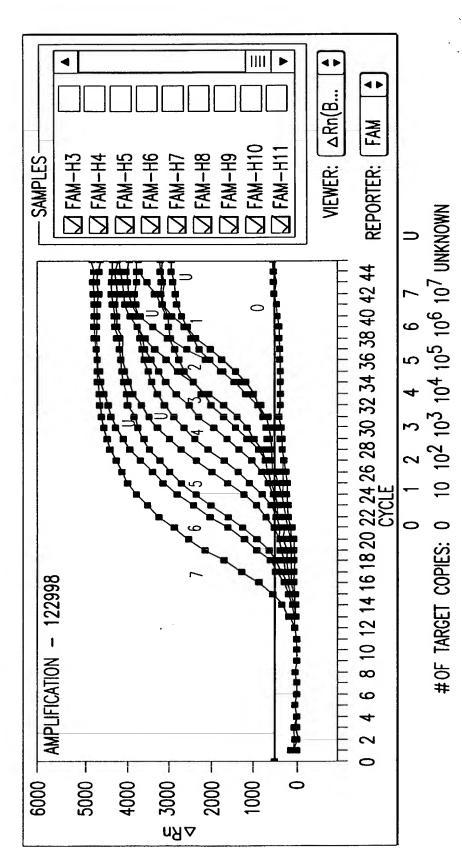


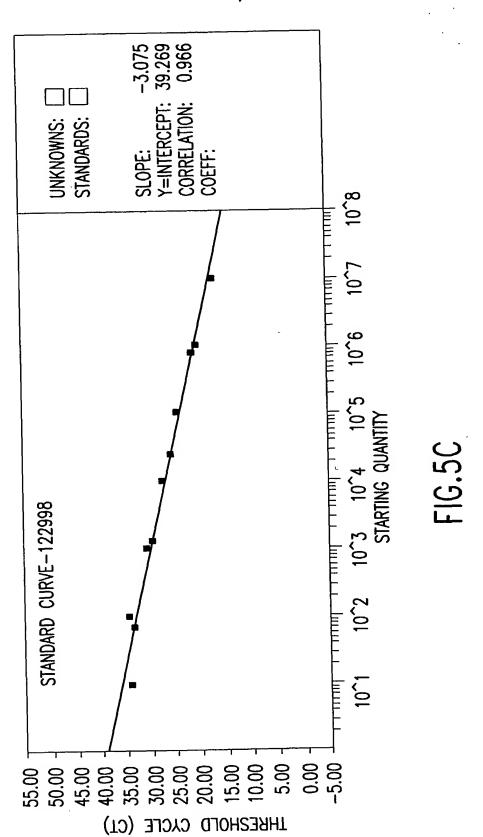
FIG.5A

Appl. No. 10/026,952, Filed. December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s): NAZARENKO et al., Tel 202/371-2600
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| | | 1 | 1111 | | | > | | | | |
|-------------------------------|------------------------|------------------------------|---------------------------------|--------|---------------------|-------------|---------|-------------------|---------------------|--|
| | STD DEV | 13.424 | 23.908 | 18.654 | 14.066 | 18.699 | | | | |
| | CI | 45.000 | 30.459 | 26.266 | 22.661 | 18.267 | | | | |
| | | FAM-G1 | FAM-H1 | FAM-H2 | FAM-H3 | FAM-H4 | | | | |
| THRESHOLD CYCLE CALCULATION — | INVESTIGATION CONTOURS | USE THRESHOLD: 505.0 SUGGEST | MULT. * STDDEY: 10.0 * 14.012 | | OMIT THRESHOLD: 2.0 | BACE INF | טטררוור | START: 4 STOP: 12 | UPDATE CALCULATIONS | |

FIG.5B

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Dkt No. 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s). NAZARENKO et al.; Tel 202/371-2600
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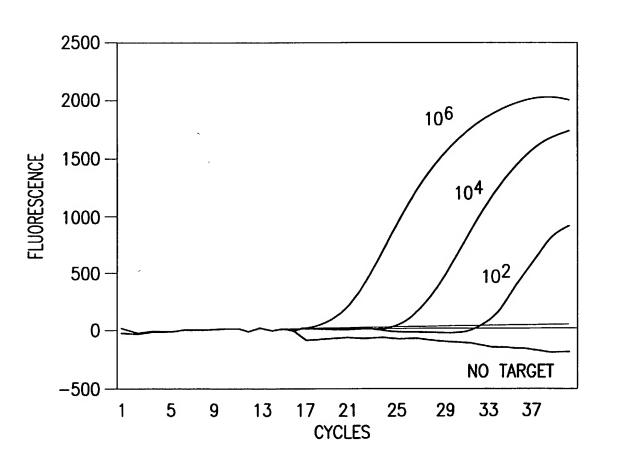


FIG.6

Appl No 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s). NAZARENKO et al., Tel·202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

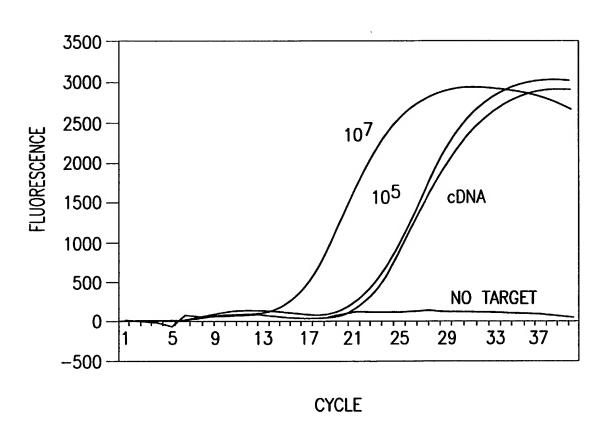


FIG.7

Appl. No 10/026,952, Filed. December 27, 2001 Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s). NAZARENKO et al., Tel 202/371-2600 Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

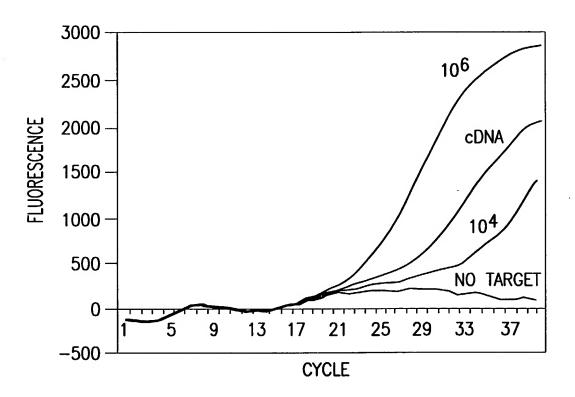
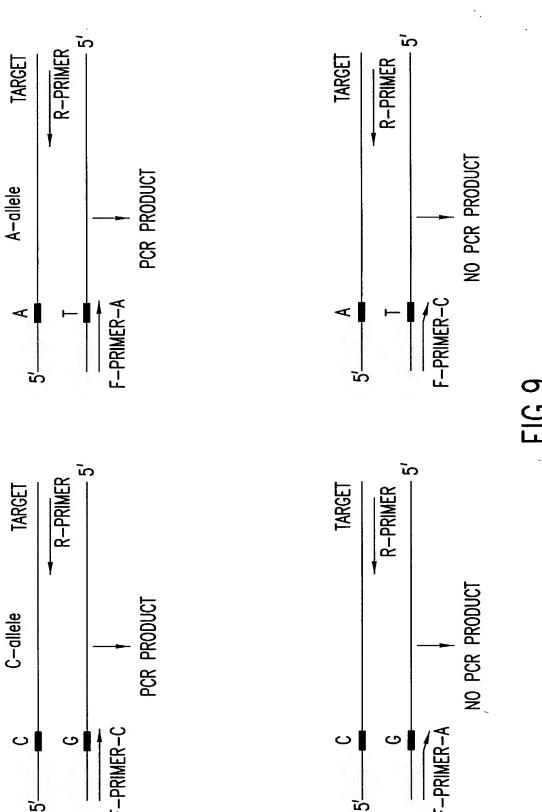


FIG.8

Appl No 10/026,952; Filed December 27, 2001
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Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

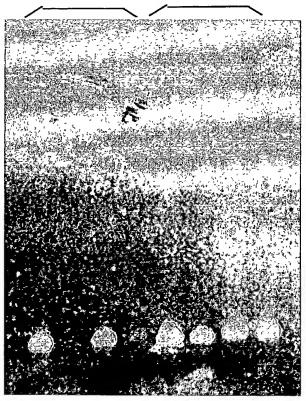


Sheet 12 of 60

Appl No 10/026,952; Filed December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

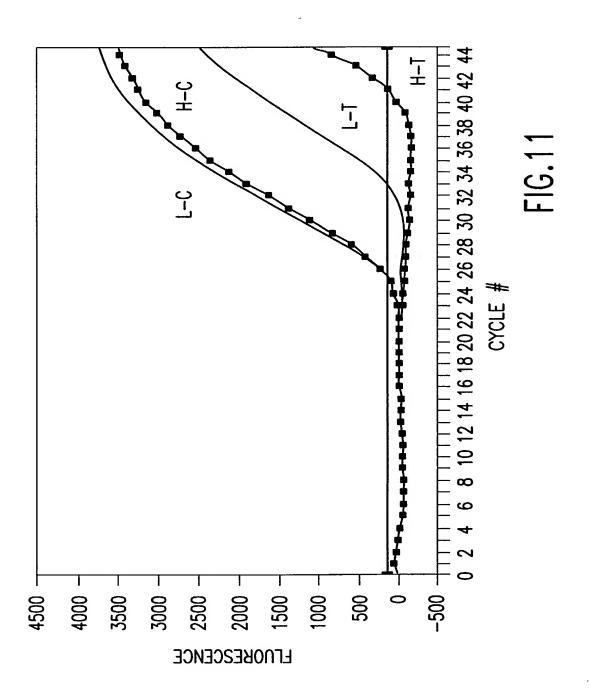
12/60

modified unmodified

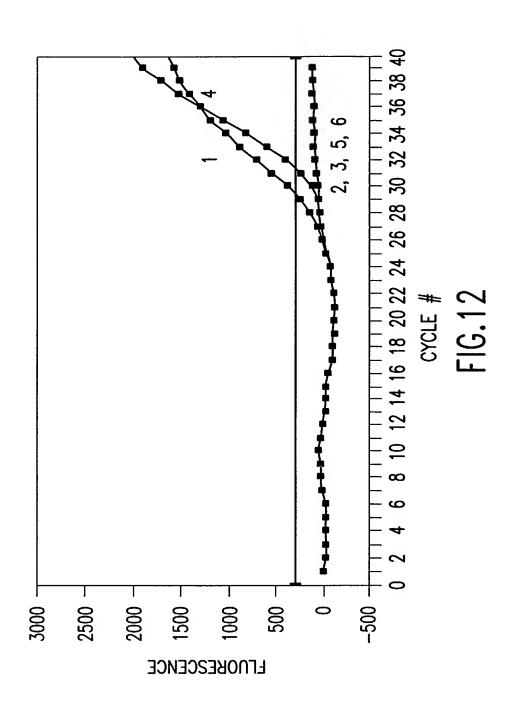


1 2 3 4 5 6 7 8 FIG.10

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Dkt No 0942.4980006/RWE/AGU; Group Art Unit. 1623
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Inventor(s): NAZARENKO et al; Tel: 202/371-2600
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Appl No 10/026,952; Filed. December 27, 2001
Dkt. No. 0942.4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al.; Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

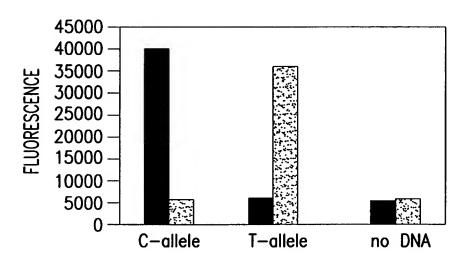
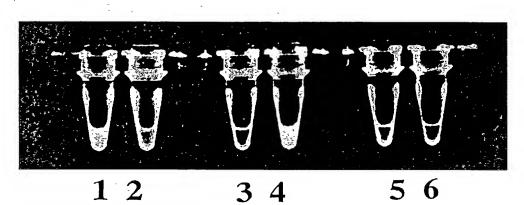


FIG.13A

Sheet 16 of 60

Appl No 10/026,952, Filed December 27, 2001
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Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title: Primers and Methods for the Detection and Discrimination
of Nucleic Acids

16/60



1 4

C-primer

T-primer

FIG.13B

Sheet 17 of 60

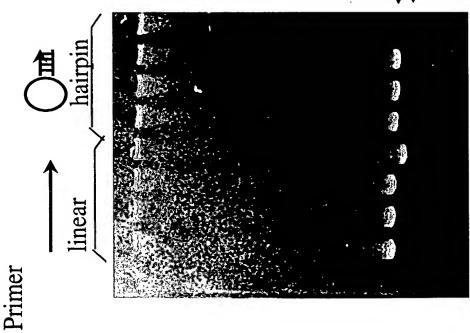
Appl No. 10/026,952, Filed December 27, 2001 Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s). NAZARENKO et al.; Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

17/60



106 copies104 copies102 copies0 copies

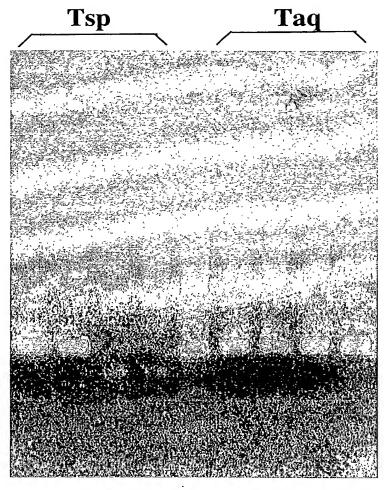
PCR productPrimer-dimer



Sheet 18 of 60

Appl. No 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU; Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel: 202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids

18/60



1 2 3 4 M 4 3 2 1 FIG.15

1 - 297 WT

2 - 300 WT

3 - 297 C→T Mut

4 - 300 G→T Mut

M - 100 bp marker

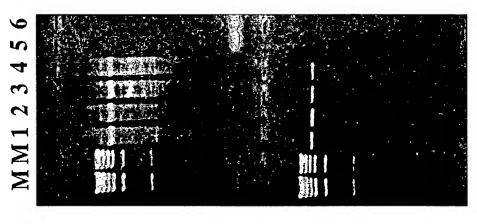
Sheet 19 of 60

Appl. No. 10/026,952, Filed December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

19/60

M-1 kb marker

1, 2 - 50 ng DNA 3, 4 - 20 ng DNA 5, 6 - no DNA



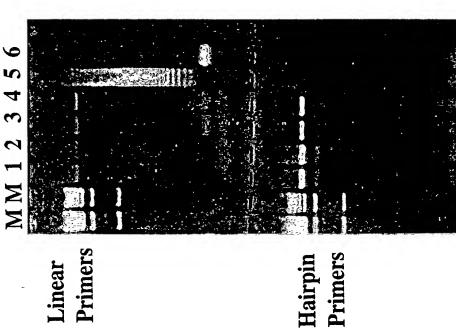


FIG.16A

FIG.16B

Sheet 20 of 60

Appl. No. 10/026,952; Filed. December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
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Title. Primers and Methods for the Detection and Discrimination

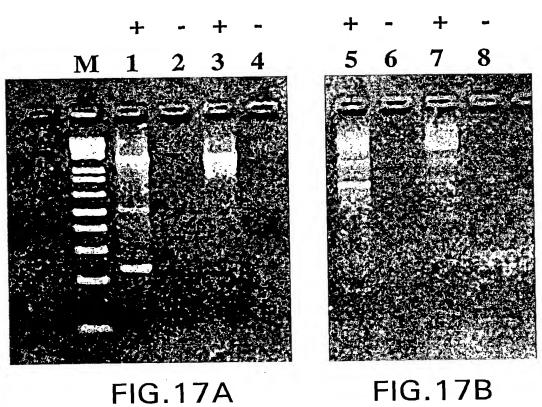


FIG.17B

Appl No. 10/026,952, Filed December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit: 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids

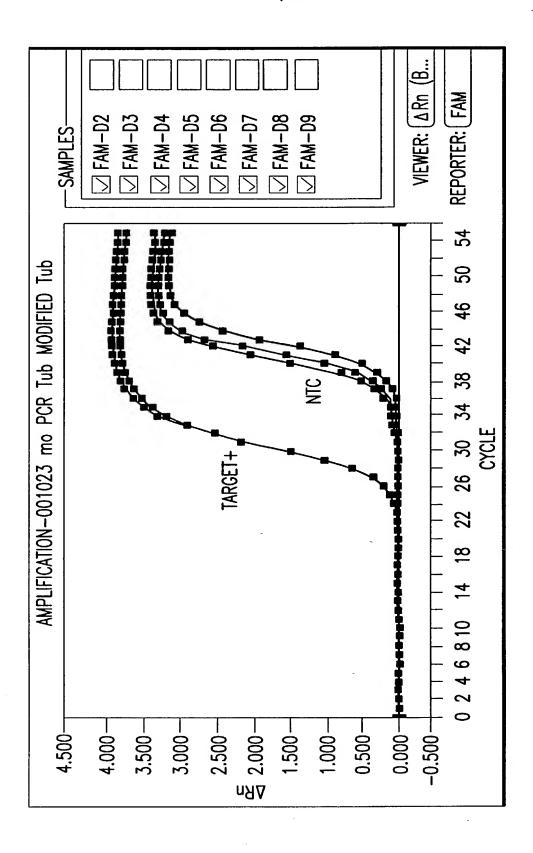


FIG.18A

Sheet 22 of 60

Appl. No. 10/026,952, Filed December 27, 2001
Dkt No. 0942.4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
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of Nucleic Acids

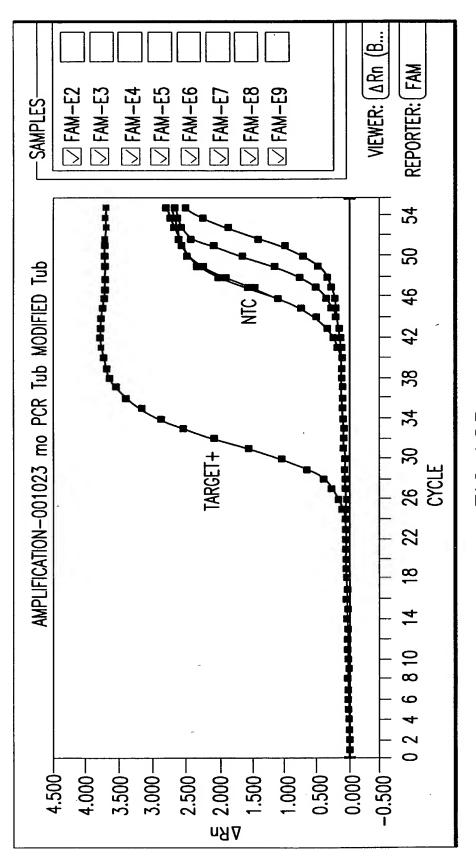


FIG. 18B

Sheet 23 of 60

Appl No 10/026,952; Filed December 27, 2001 Dkt. No. 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s) NAZARENKO et al , Tel. 202/371-2600 Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

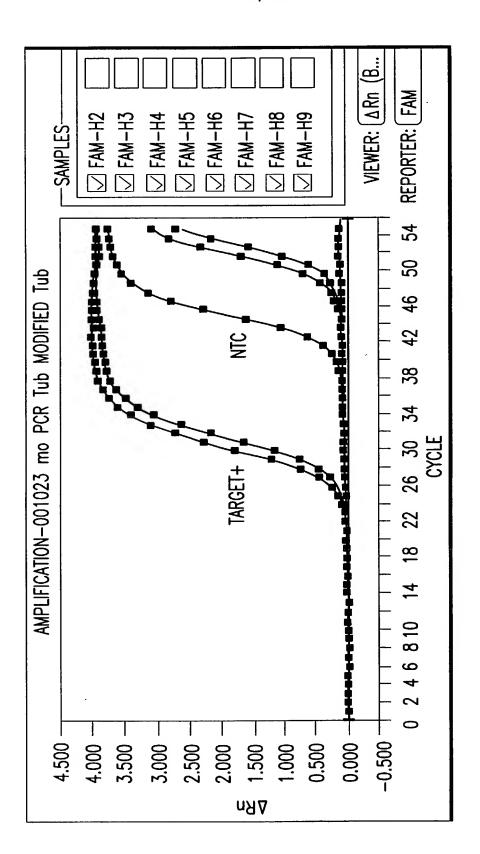


FIG.18C

Sheet 24 of 60

Appl No. 10/026,952, Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU; Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel·202/371-2600
Title: Primers and Methods for the Detection and Discrimination

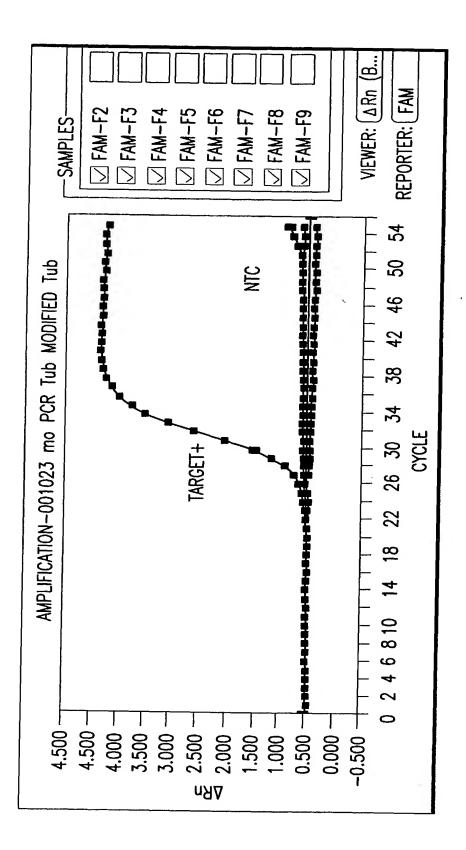


FIG. 18D

Sheet 25 of 60

Appl No 10/026,952, Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel·202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

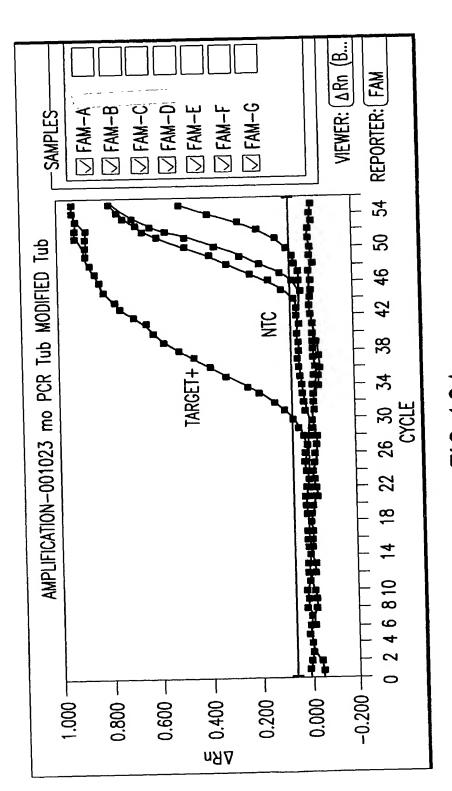


FIG.19A

Sheet 26 of 60

Appl. No. 10/026,952, Filed. December 27, 2001 Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623 Inventor(s) NAZARENKO et al.; Tel· 202/371-2600 Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

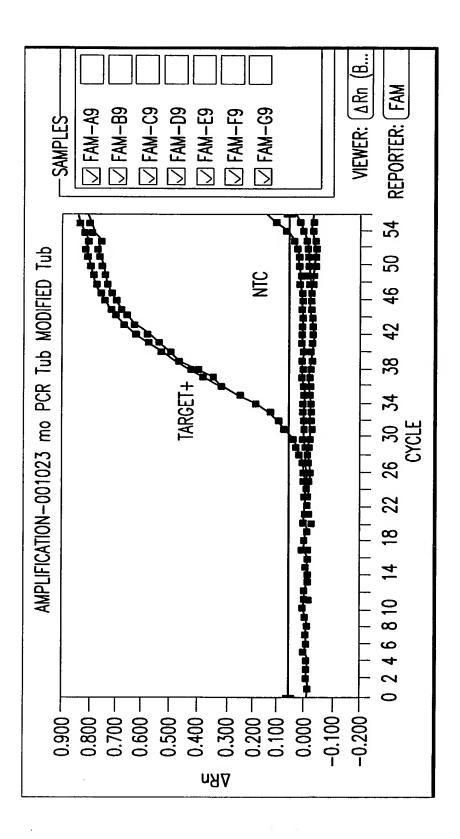


FIG. 19B

Sheet 27 of 60

Appl No 10/026,952, Filed December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623
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Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

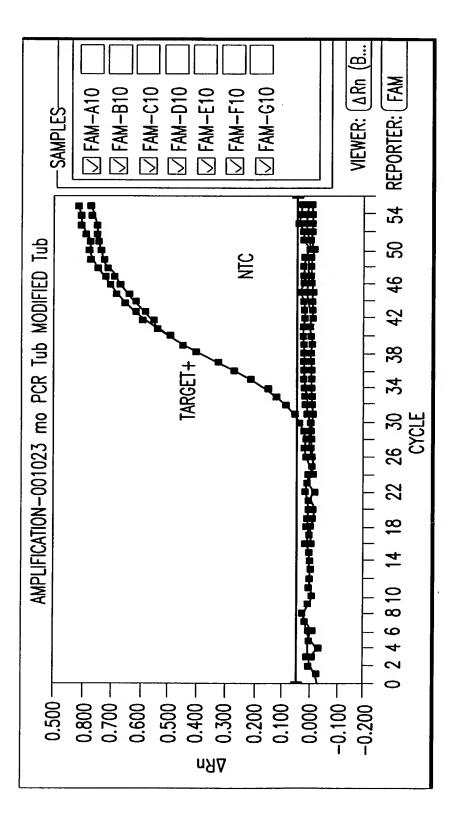


FIG.19C

Sheet 28 of 60

Appl. No. 10/026,952, Filed December 27, 2001
Dkt No. 0942.4980006/RWE/AGU; Group Art Unit 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination
of Nucleic Acids

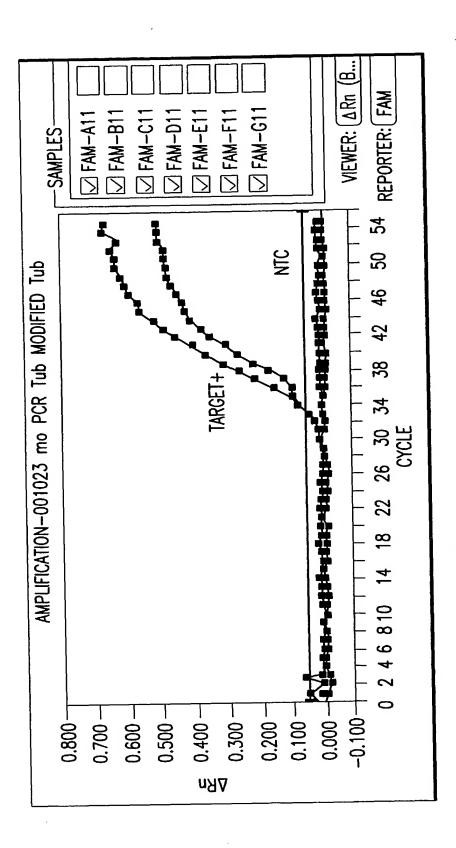


FIG.19D

Appl No 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit: 1623
Inventor(s) NAZARENKO et al., Tel· 202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

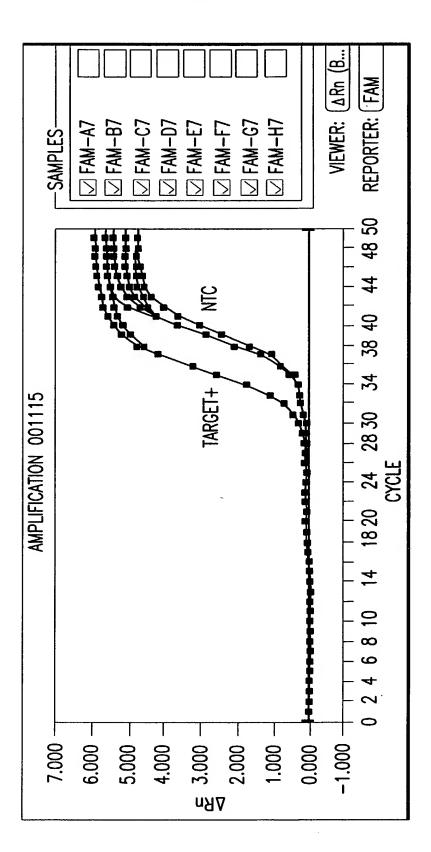


FIG.20A

Appl No 10/026,952, Filed. December 27, 2001
Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s). NAZARENKO et al , Tel·202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

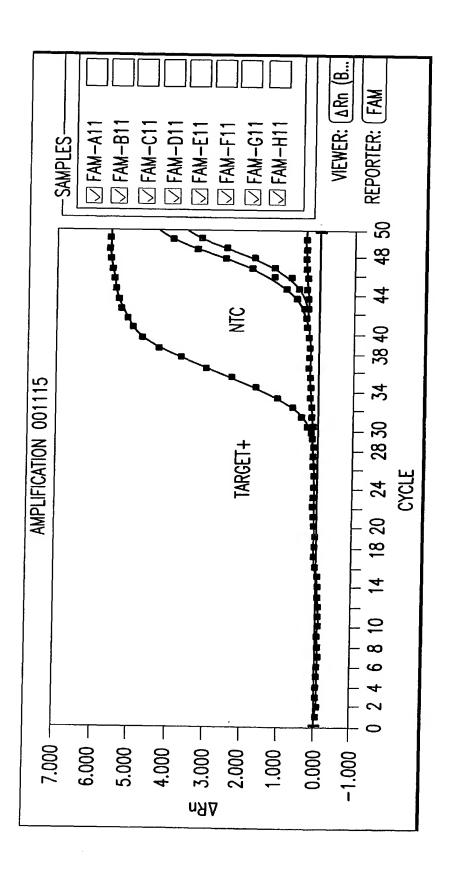


FIG.20B

Sheet 31 of 60

Appl No 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination
of Nucleic Acids

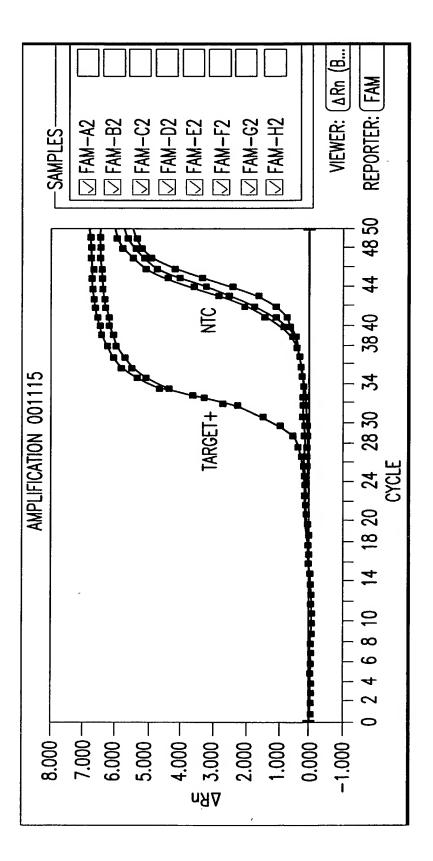


FIG. 20C

Appl No. 10/026,952, Filed: December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
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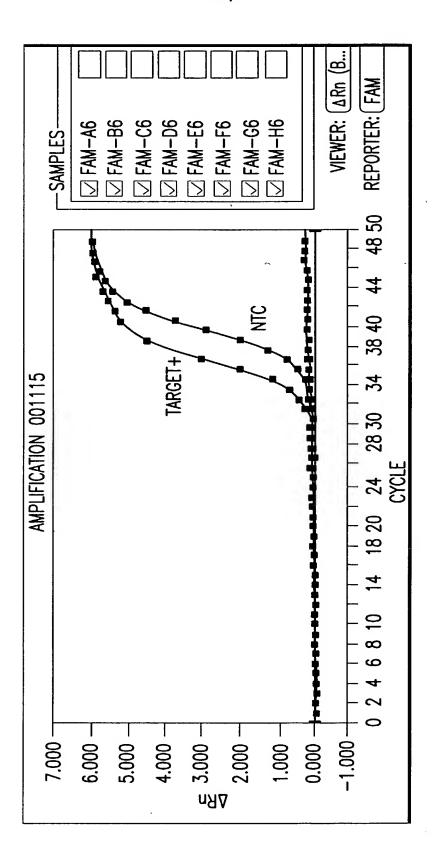


FIG.20D

Sheet 33 of 60

Appl No 10/026,952, Filed. December 27, 2001

Dkt No 0942 4980006/RWE/AGU; Group Art Unit 1623

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Title. Primers and Methods for the Detection and Discriminatio of Nucleic Acids

33/60

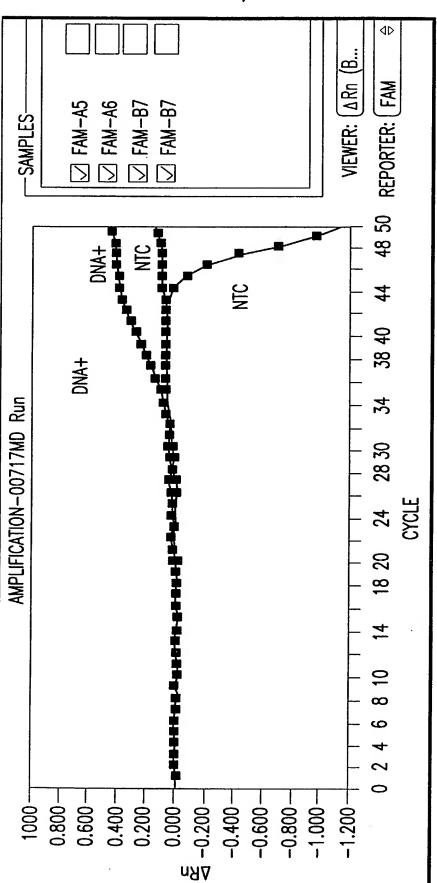
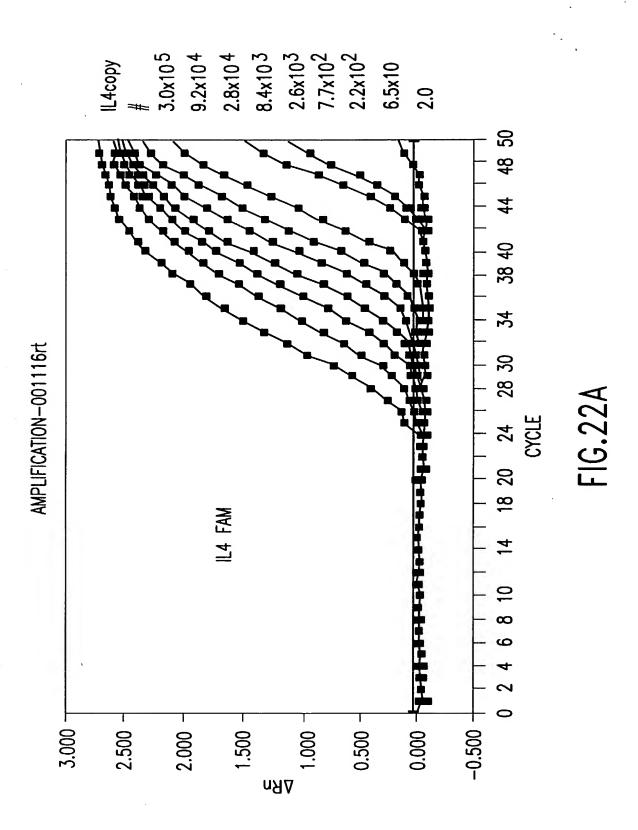
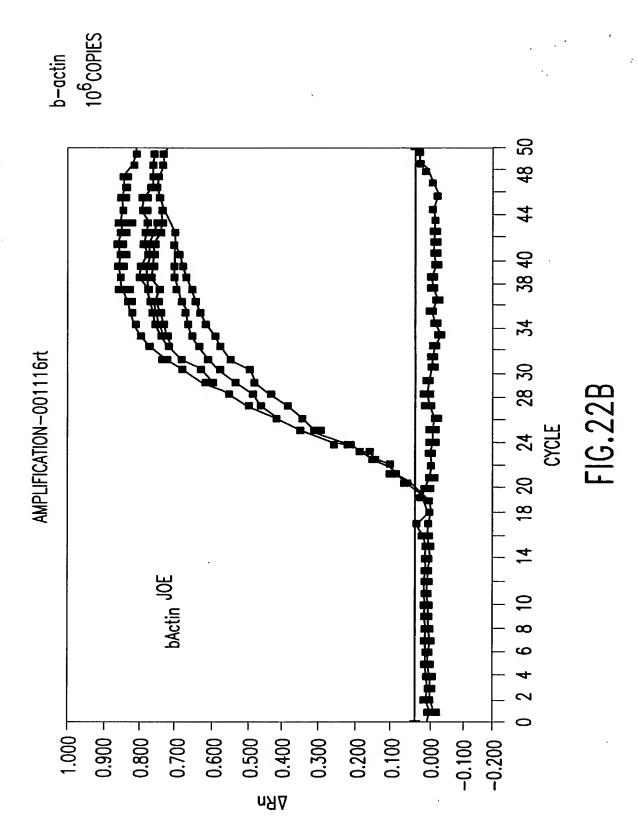


FIG.21

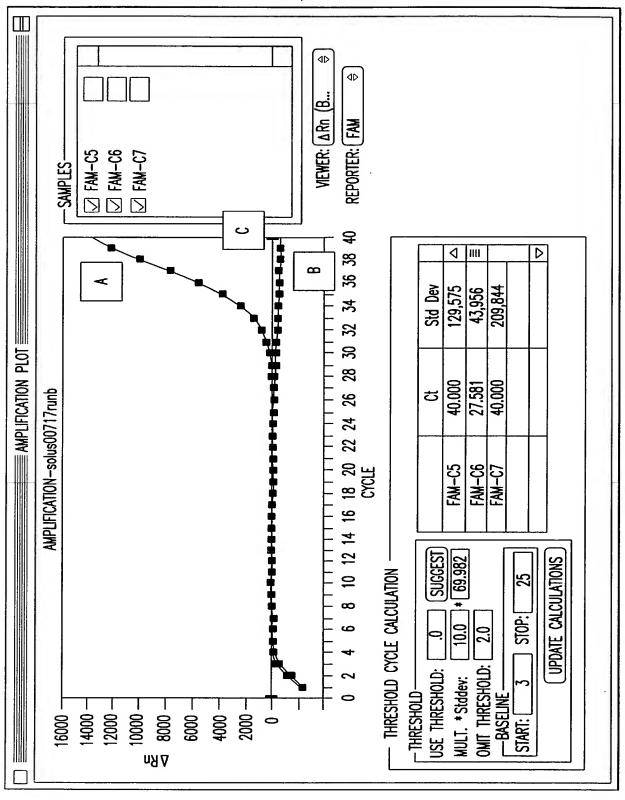
Appl No. 10/026,952, Filed December 27, 2001
Dkt. No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s). NAZARENKO et al; Tel 202/371-2600
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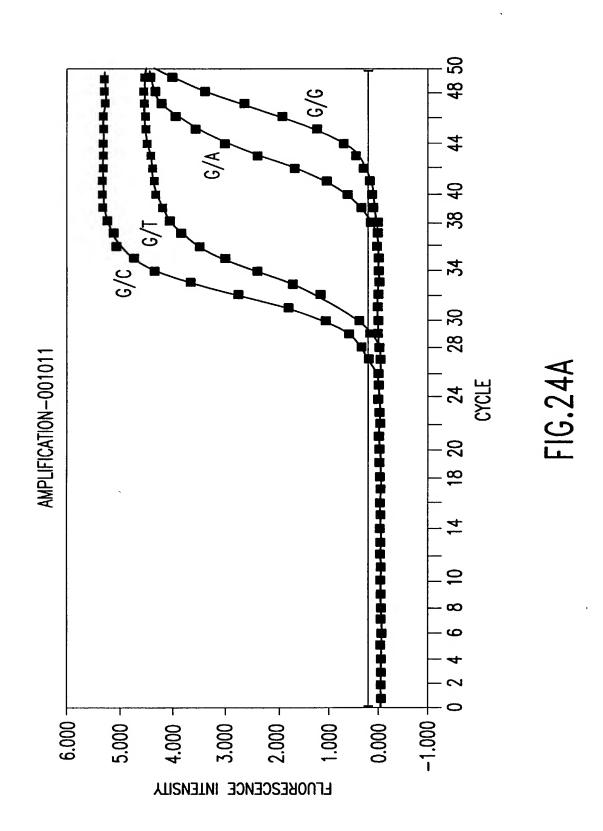
Appl No 10/026,952, Filed: December 27, 2001
Dkt No 0942,4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids



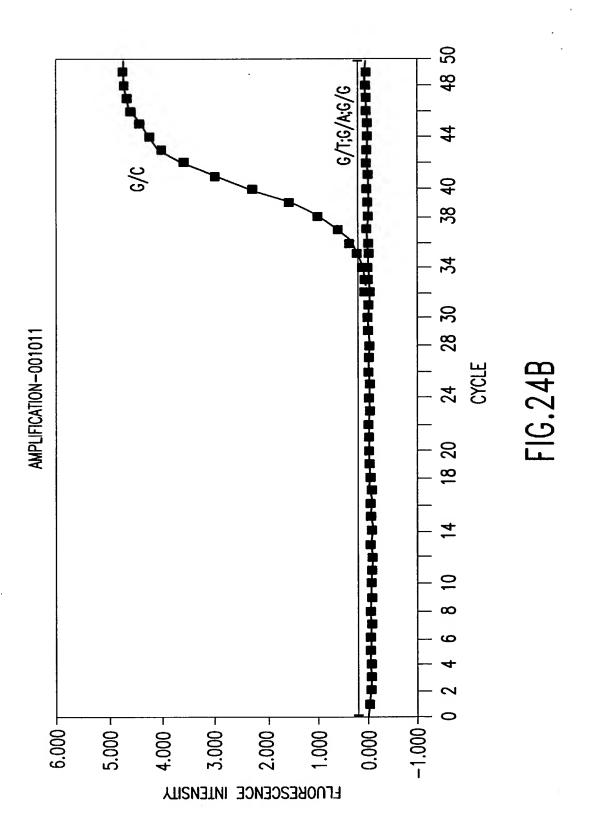
Appl No 10/026,952; Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s). NAZARENKO et al., Tel·202/371-2600
Title: Primers and Methods for the Detection and Discriminatio of Nucleic Acids

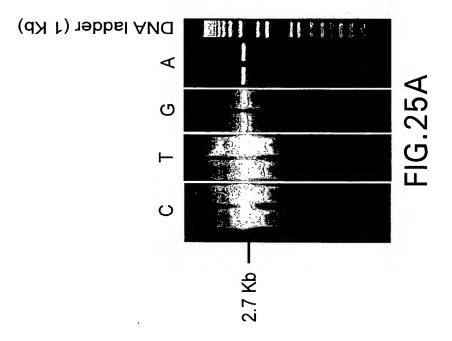


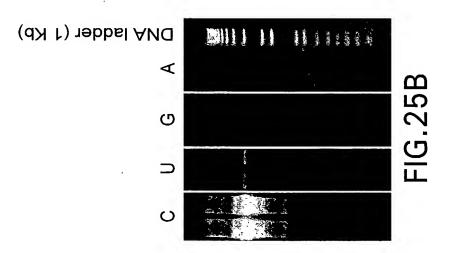
Appl. No 10/026,952, Filed. December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s): NAZARENKO et al.; Tel: 202/371-2600
Title. Primers and Methods for the Detection and Discrimination
of Nucleic Acids



Appl No 10/026,952, Filed. December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
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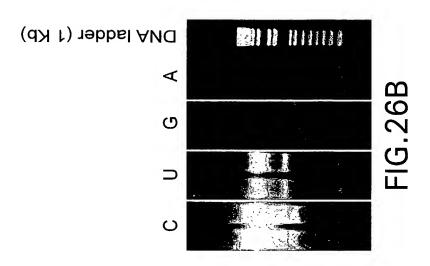
39/60

FIG.26A

Sheet 40 of 60

Appl No 10/026,952, Filed. December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination
of Nucleic Acids

40/60



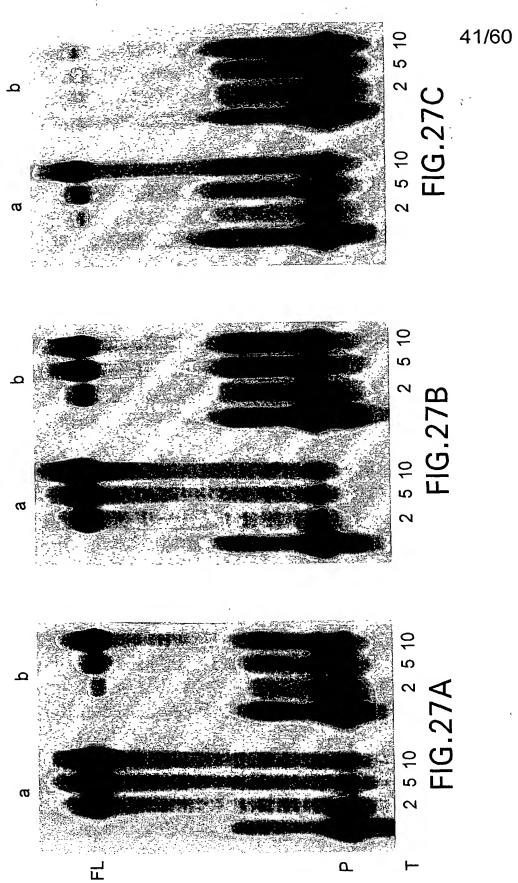
DNA ladder (1 Kb)

⋖

G

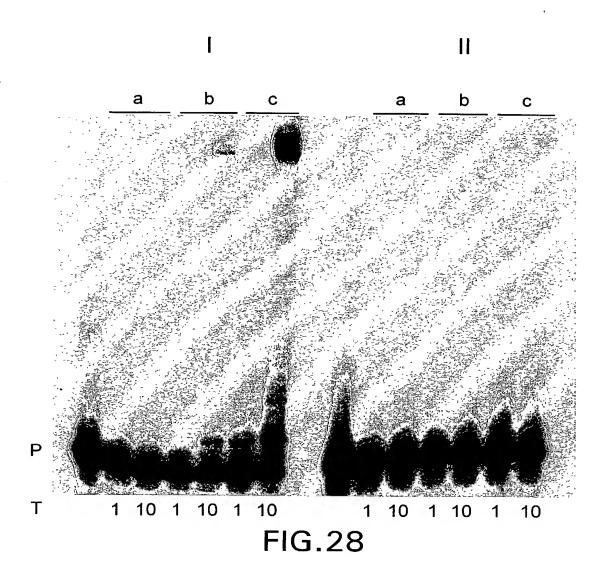
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Dkt No. 0942.4980006/RWE/AGU, Group Art Unit 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
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of Nucleic Acids



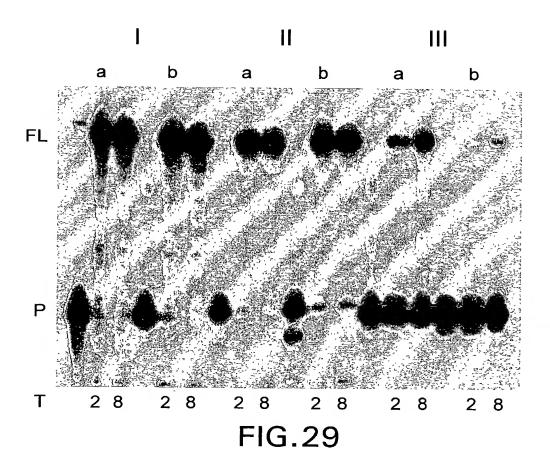
Sheet 42 of 60

Appl. No. 10/026,952; Filed. December 27, 2001
Dkt No. 0942 4980006/RWE/AGU; Group Art Unit. 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

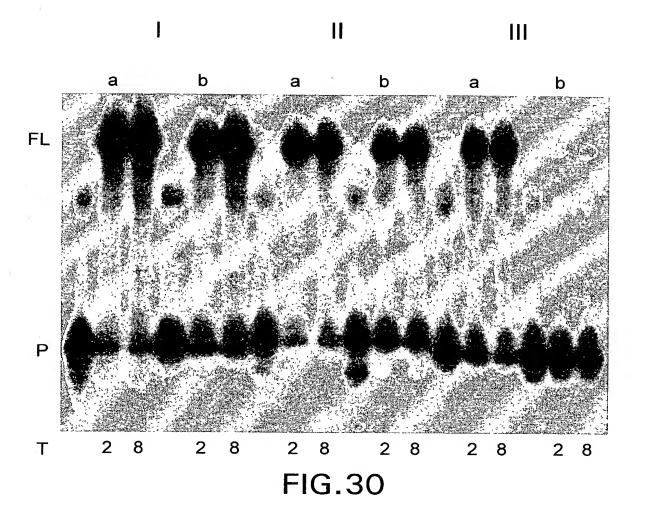


Sheet 43 of 60

Appl No 10/026,952; Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
Title: Primers and Methods for the Detection and Discrimination
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Appl No. 10/026,952; Filed. December 27, 2001
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Inventor(s) NAZARENKO et al; Tel 202/371-2600
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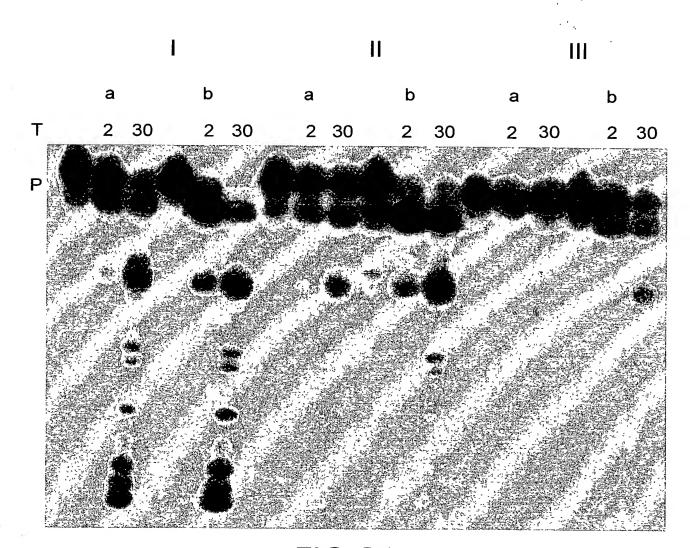


FIG.31

Sheet 46 of 60

Appl No 10/026,952, Filed. December 27, 2001
Dkt. No. 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination
of Nucleic Acids

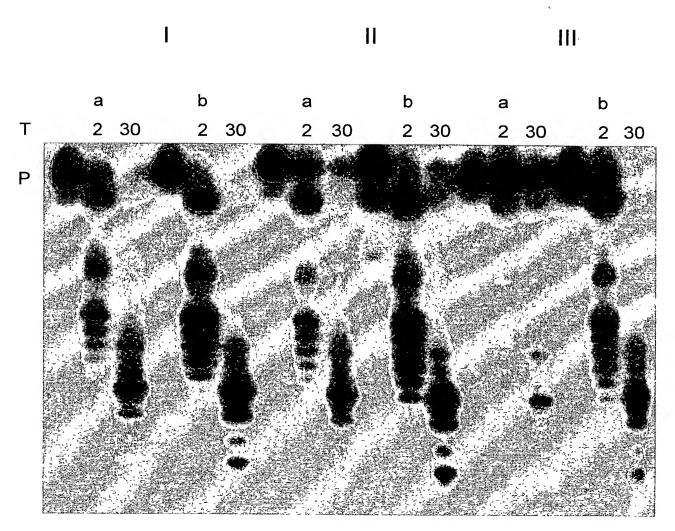


FIG.32

Sheet 47 of 60

Appl No 10/026,952; Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU; Group Art Unit. 1623
Inventor(s). NAZARENKO et al., Tel. 202/371-2600
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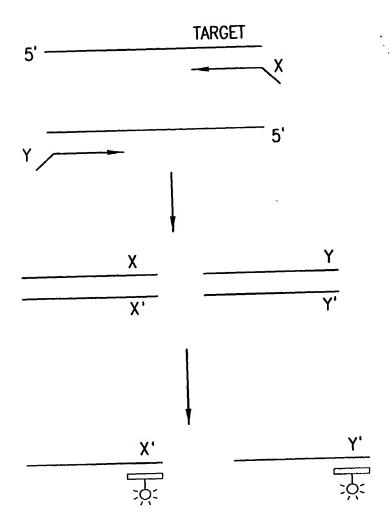
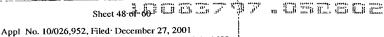
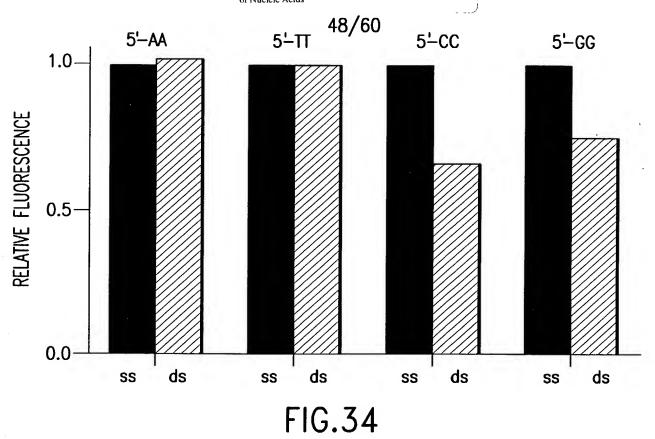


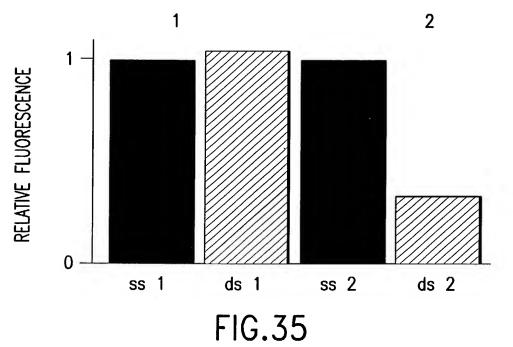
FIG.33

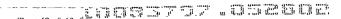


Appl No. 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Niveleic Acide









Appl No 10/026,952, Filed December 27, 2001 Dkt. No 0942,4980006/RWE/AGU, Group Art Unit 1623 Inventor(s): NAZARENKO et al.; Tel·202/371-2600 Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids

49/60

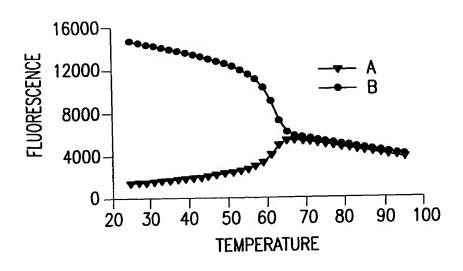


FIG.36

ggaagagtaccaccgacatcttg 5' CCTTCTCATGGTGGCTGTAGAAC 3'

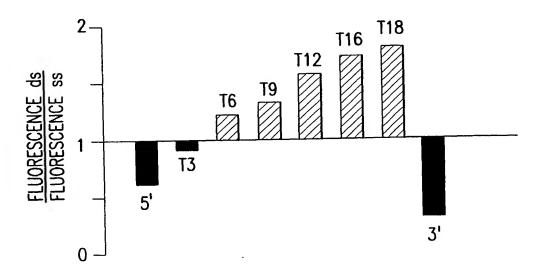


FIG.37

Sheet 50 of 60

Appl No. 10/026,952, Filed December 27, 2001
Dkt. No. 0942.4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

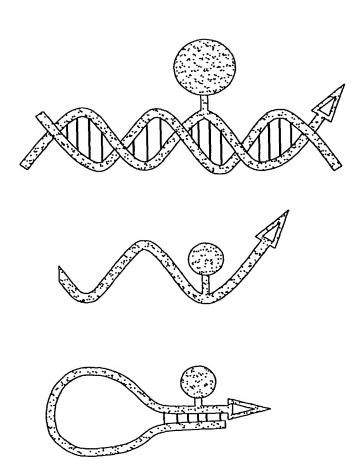


FIG.38

Appl No 10/026,952, Filed December 27, 2001 Dkt No 0942 4980006/RWE/AGU; Group Art Unit: 1623 Inventor(s)· NAZARENKO et al., Tel. 202/371-2600 Title Primers and Methods for the Detection and Discriminatio of Nucleic Acids

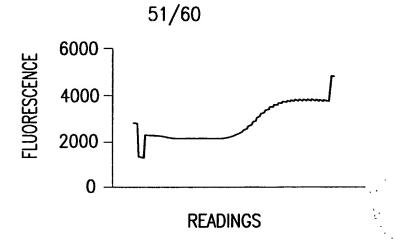
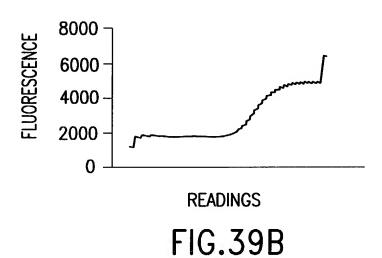


FIG.39A



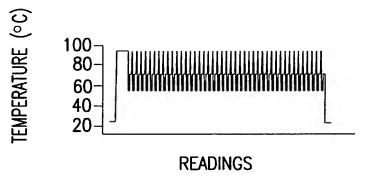
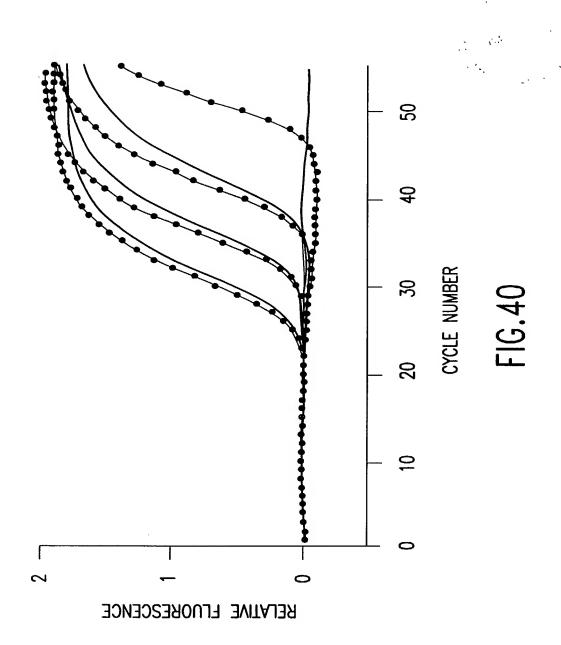


FIG.39C

Sheet 52 of 60

Appl No. 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al.; Tel 202/371-2600
'Title Primers and Methods for the Detection and Discrimination of Nucleic Acids



Appl No. 10/026,952, Filed December 27, 2001 Dkt No. 0942 4980006/RWE/AGU; Group Art Unit 1623 Inventor(s)· NAZARENKO et al.; Tel· 202/371-2600 Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

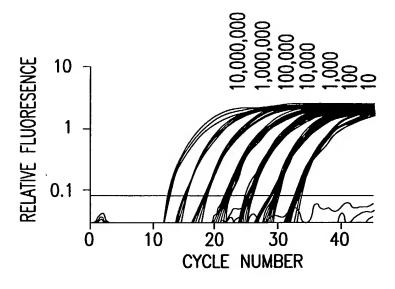


FIG.41A

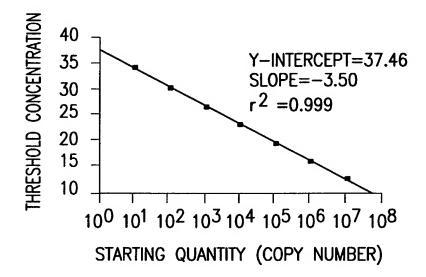
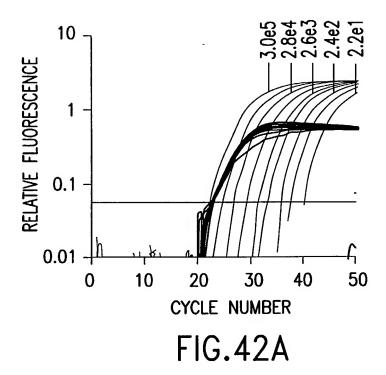
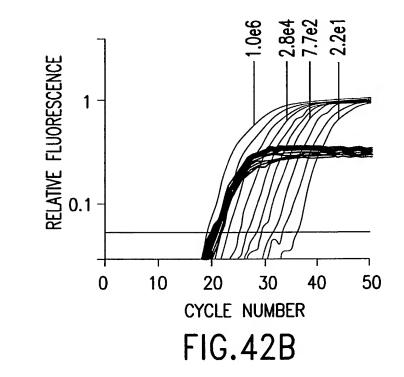


FIG.41B

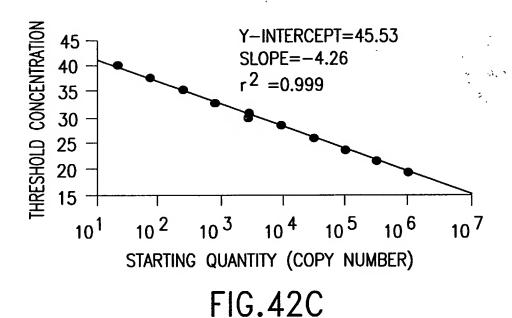
Sheet 54 of 60

Appl No 10/026,952, Filed. December 27, 2001
Dkt. No. 0942 4980006/RWE/AGU, Group Art Umt. 1623
Inventor(s). NAZARENKO et al.; Tel 202/371-2600
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Appl No 10/026,952, Filed December 27, 2001
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Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids



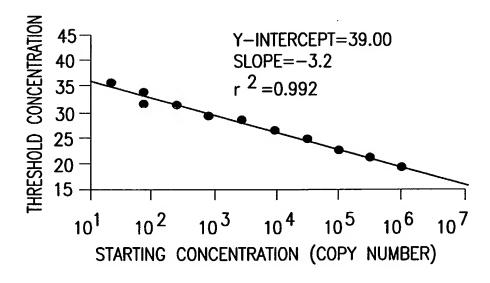
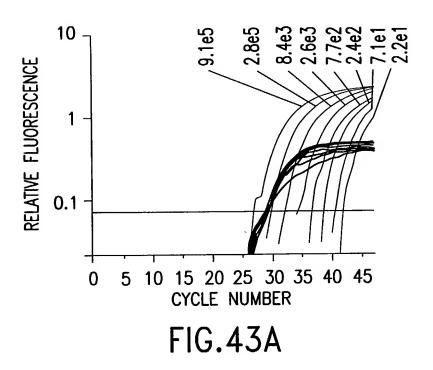
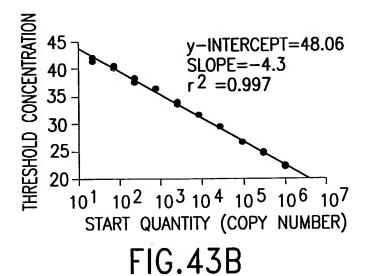


FIG.42D

Sheet 56 of 60

Appl No 10/026,952, Filed December 27, 2001 Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s). NAZARENKO et al., Tel 202/371-2600 Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids





Sheet 57 of 60

Appl. No 10/026,952, Filed December 27, 2001
Dkt No 0942,4980006/RWE/AGU; Group Art Unit: 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

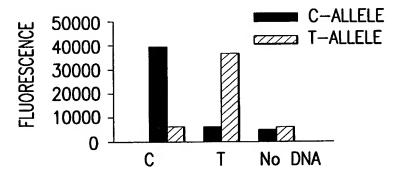


FIG.44A

-1, TCLLS (C) - CLSC SCIE

Sheet 58 of 60

'Appl No 10/026,952, Filed. December 27, 2001
Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s)· NAZARENKO et al.; Tel 202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids

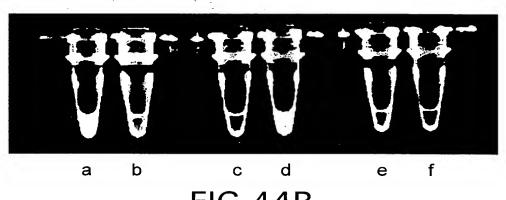
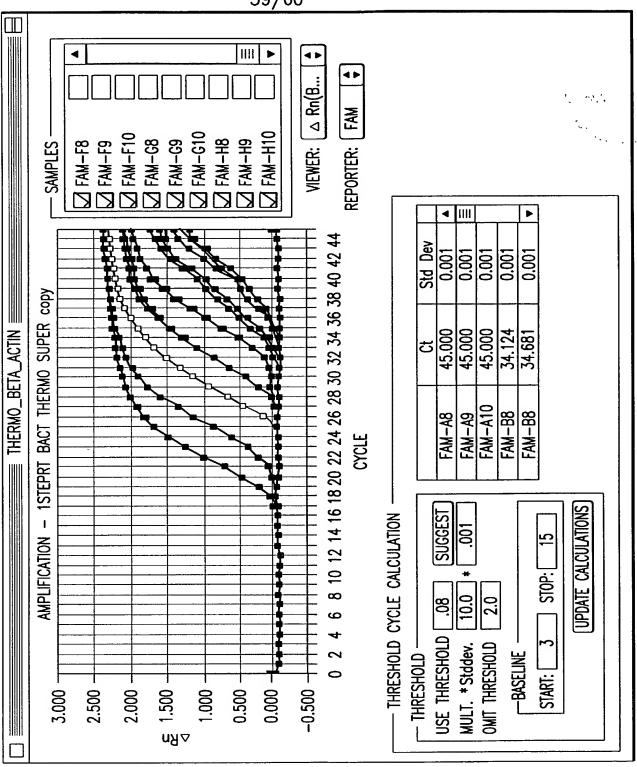


FIG.44B

Appl. No. 10/026,952, Filed December 27, 2001
Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel· 202/371-2600
Title. Primers and Methods for the Detection and Discrimination
of Nucleic Acids



-16.45

Sheet 60 of 60

Appl No. 10/026,952, Filed December 27, 2001
Dkt. No. 0942.4980006/RWE/AGU, Group Art Unit: 1623
Inventor(s) NAZARENKO et al.; Tel 202/371-2600
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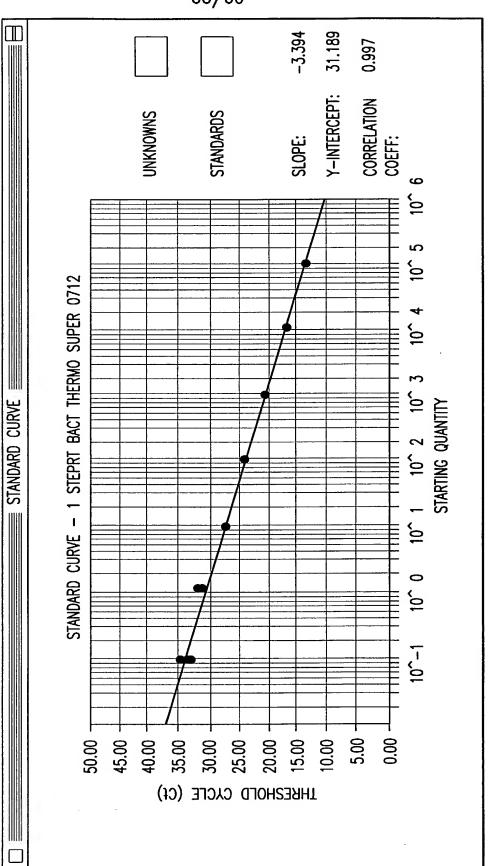


FIG.46